

## Claims:

1. A method of predicting whether an individual having hepatitis B virus (HBV) infection will respond to interferon (IFN) treatment; the method comprising;
    - 5 determining the presence or absence of antibodies reactive with a preS1(94-117) peptide in a sample obtained from the individual,
    - the presence of said antibodies in said sample being indicative that said individual will respond to said treatment.
  - 10
  - 15
  - 20
  - 25
  - 30
  - 35
  - 40
  - 45
  - 50
  - 55
  - 60
  - 65
  - 70
  - 75
  - 80
  - 85
  - 90
  - 95
2. A method according to claim 1 comprising detecting the presence of said antibodies in said sample and thereby determining that the individual will respond to IFN treatment
3. A method according to claim 1 comprising detecting the absence of said antibodies in said sample and thereby determining that the individual will not respond to IFN treatment
4. A method according to any one of the preceding claims wherein the individual has chronic HBV infection.
5. A method according to any one of the preceding claims wherein the individual is HBeAg positive.
6. A method according to any one of claims 1 to 4 wherein the individual is HBeAg negative.
7. A method according to any one of the preceding claims wherein the antibodies are IgG or IgM antibodies.

8. A method according to any one of the preceding claims wherein the sample is a blood, serum or plasma sample.

9. A method according to any one of the preceding claims  
5 comprising;

contacting the sample with a preS1(94-117) peptide and;  
determining binding of said antibodies to said peptide.

10. A method according to claim 9 wherein the peptide  
10 comprises a detectable label.

11. A method according to claim 9 wherein said peptide is  
immobilised.

15 12. A method according to any one of claims 9 to 11 wherein  
said binding is detected with a labelled secondary antibody.

13. A kit for use in predicting whether an individual having  
hepatitis B will respond to interferon (IFN) treatment, the  
20 kit comprising;  
a preS1(94-117) peptide.

14. A kit according to claim 13 wherein said peptide is  
immobilised on a solid support.

25 15. A kit according to claim 14 wherein the solid support is  
a microtitre plate.

16. A kit according to any one of claims 13 to 15 further  
30 comprising a labelled secondary antibody which binds to human  
antibodies.

17. A kit according to any one of claims 13-16 further comprising regents for detecting the binding of the labelled secondary antibody
- 5 18. A kit according to any one of claims 13-17 further comprising wash buffers.
- 10 19. A kit according to any one of claims 13-18 further comprising sample-handling containers.
20. A method of treating a hepatitis B infection in an individual comprising;  
identifying the individual as responsive to interferon (IFN) treatment using a method according to any one of claims  
15 1 to 12, and;  
administering IFN to said individual.
21. A method according to claim 20 wherein the IFN is alpha-IFN.
- 20 22. A method according to claim 20 or claim 21 wherein corticosteroid is administered to the individual.
- 25 23. A method of predicting whether an individual having hepatitis B virus (HBV) infection will respond to interferon (IFN) treatment which is substantially as described herein, with reference to the accompanying table and figures.